

FIG. 1

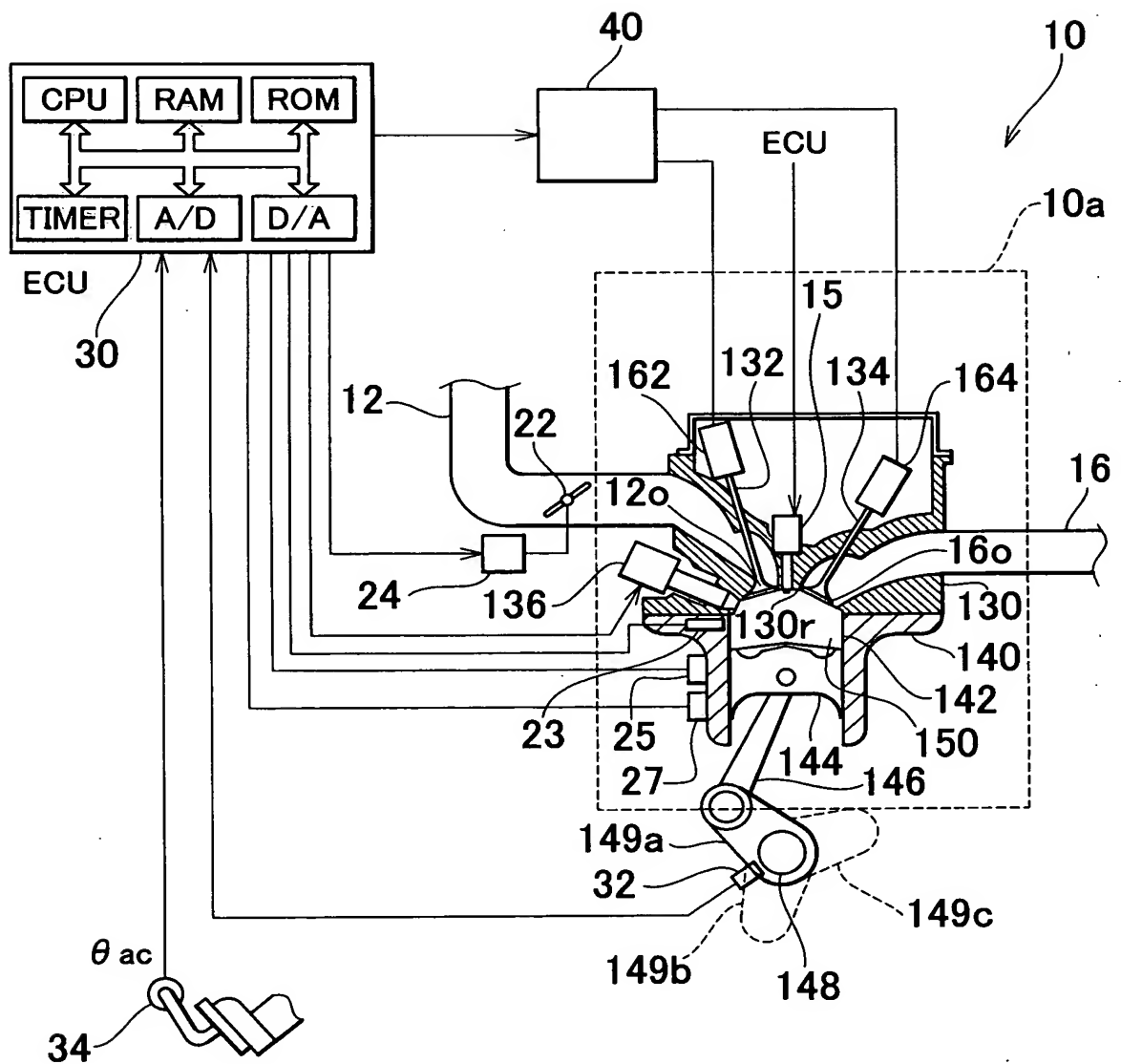


FIG. 2

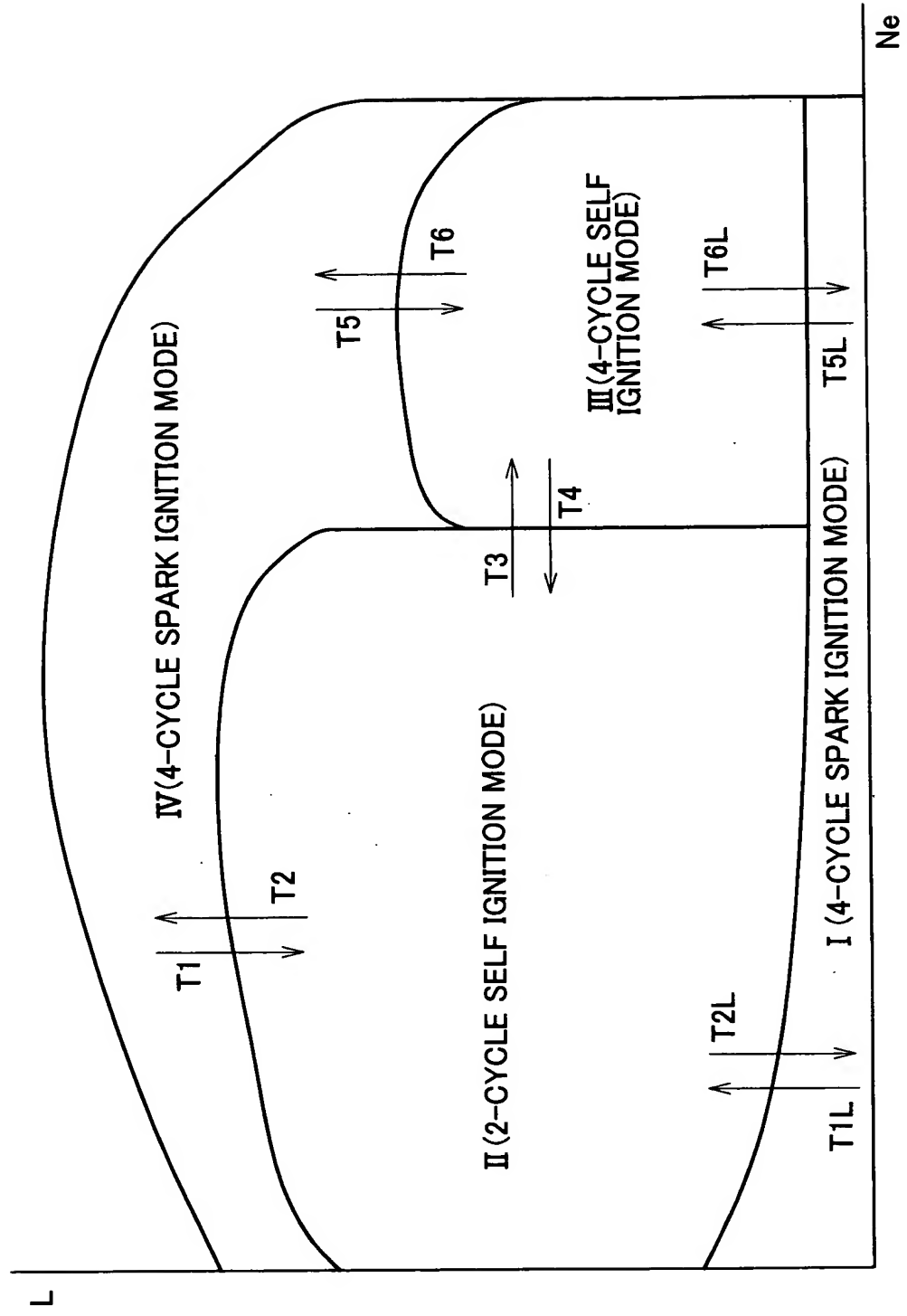


FIG. 3

(I) 4-CYCLE SPARK IGNITION MODE IN LOW LOAD

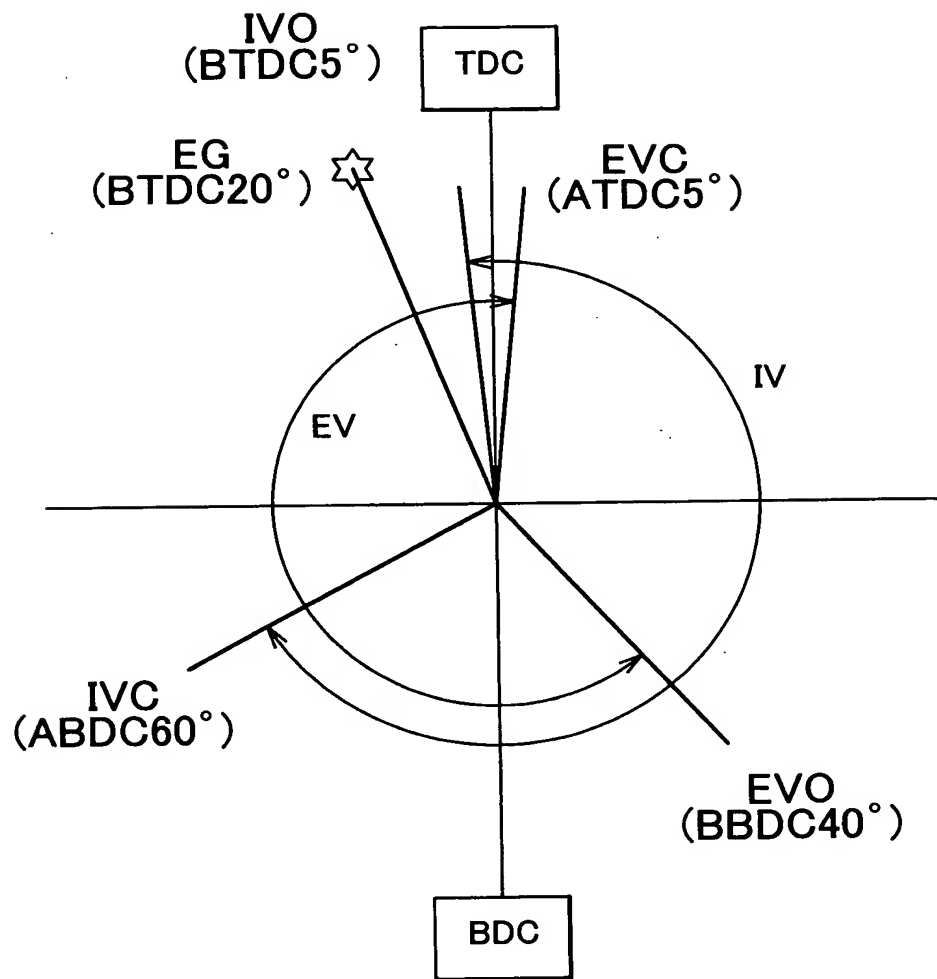


FIG. 4

(IV) 4-CYCLE SPARK IGNITION MODE IN HIGH LOAD

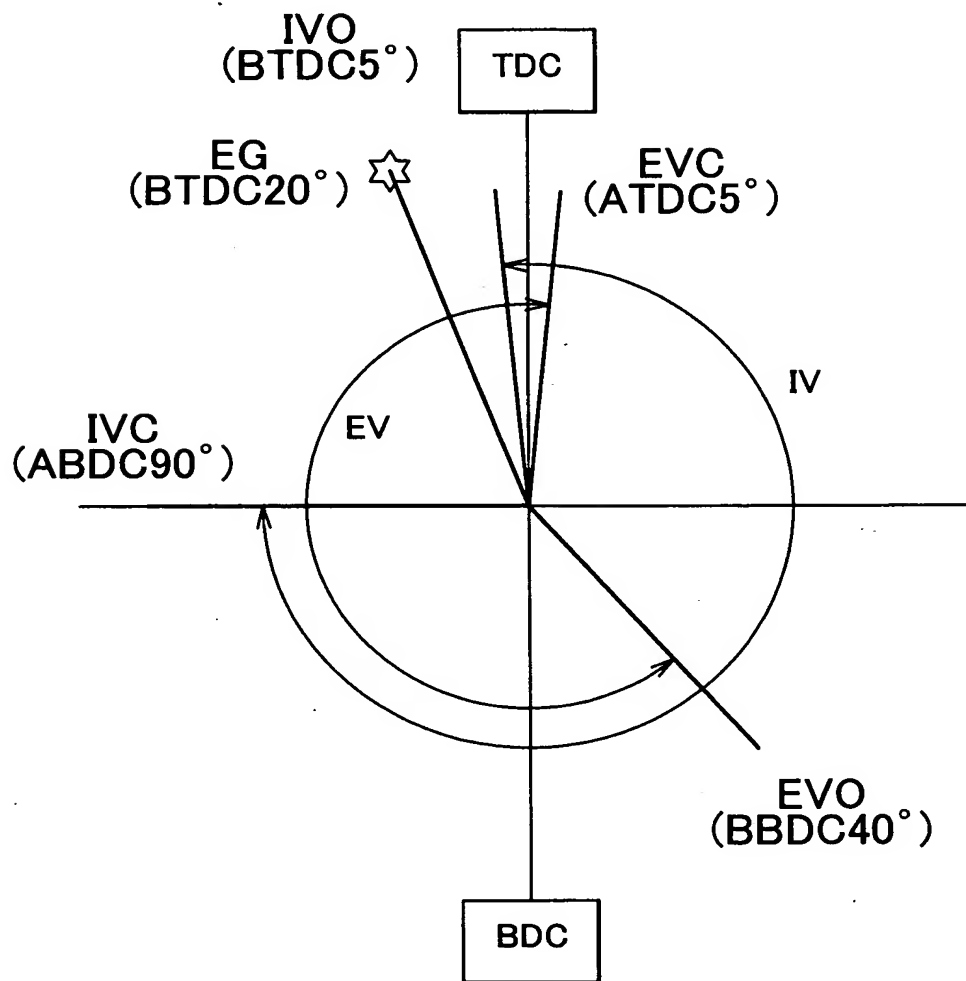


FIG. 5

(III) 4-CYCLE SELF IGNITION MODE

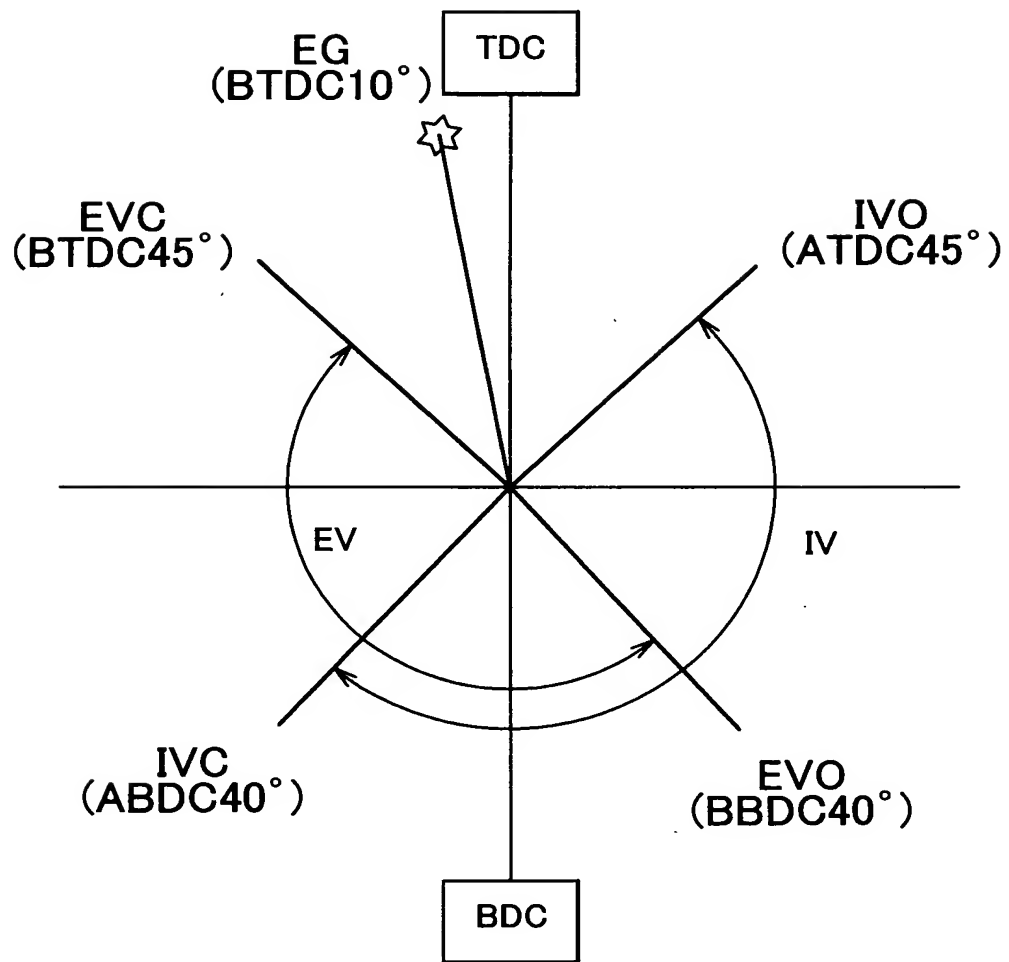


FIG. 6

(II) 2-CYCLE SELF IGNITION MODE

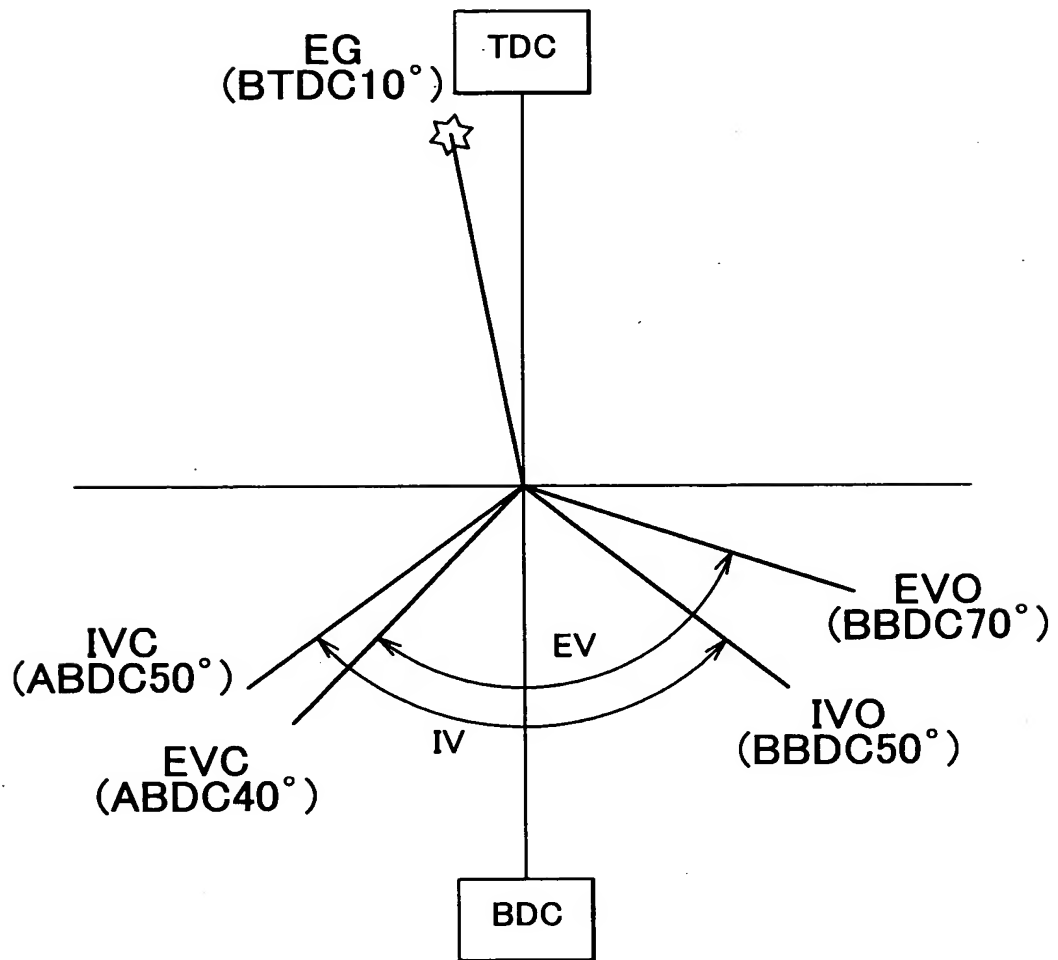


FIG. 7

- (T1) 4-CYCLE SPARK IGNITION MODE IN HIGH LOAD →
2-CYCLE SELF IGNITION MODE
- (T1L) 4-CYCLE SPARK IGNITION MODE IN LOW LOAD →
2-CYCLE SELF IGNITION MODE
- (T4) 4-CYCLE SELF IGNITION MODE →
2-CYCLE SELF IGNITION MODE

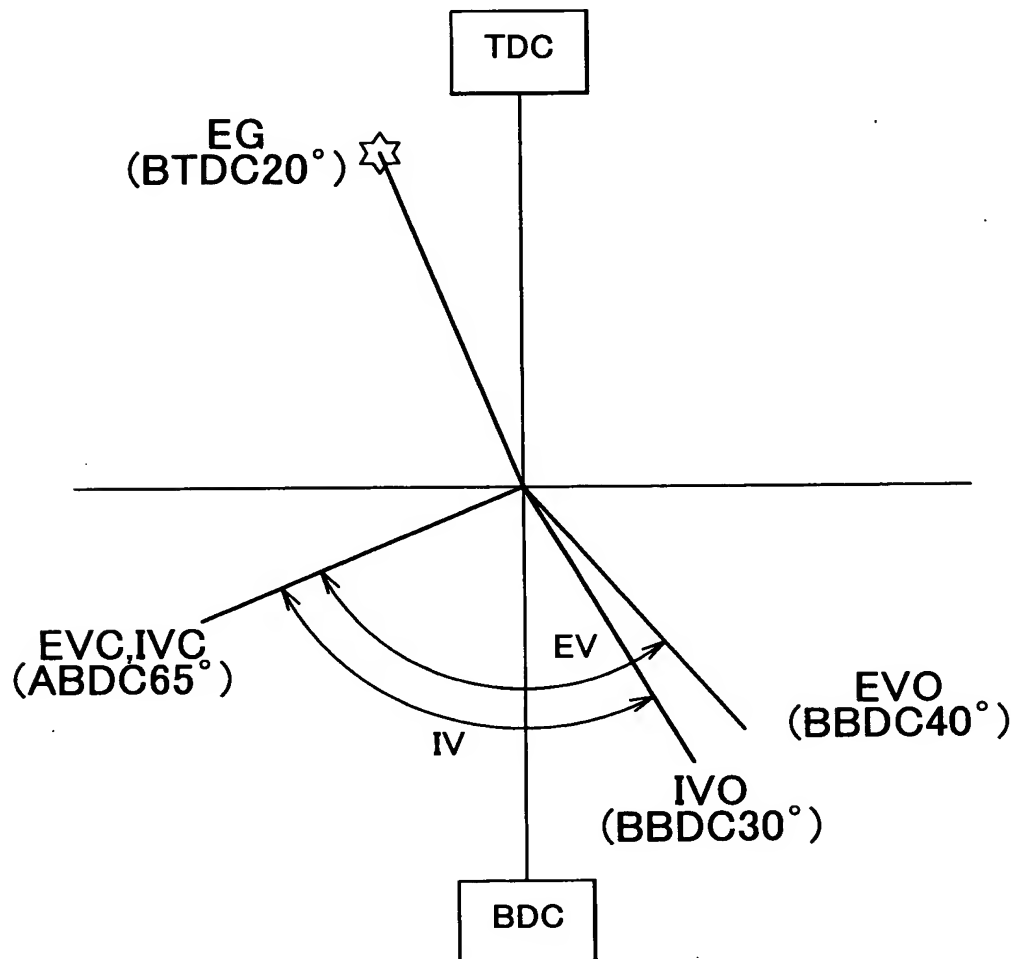


FIG. 8

(T2) 2-CYCLE SELF IGNITION MODE →
 4-CYCLE SPARK IGNITION MODE IN HIGH LOAD
 (T2L) 2-CYCLE SELF IGNITION MODE →
 4-CYCLE SPARK IGNITION MODE IN LOW LOAD

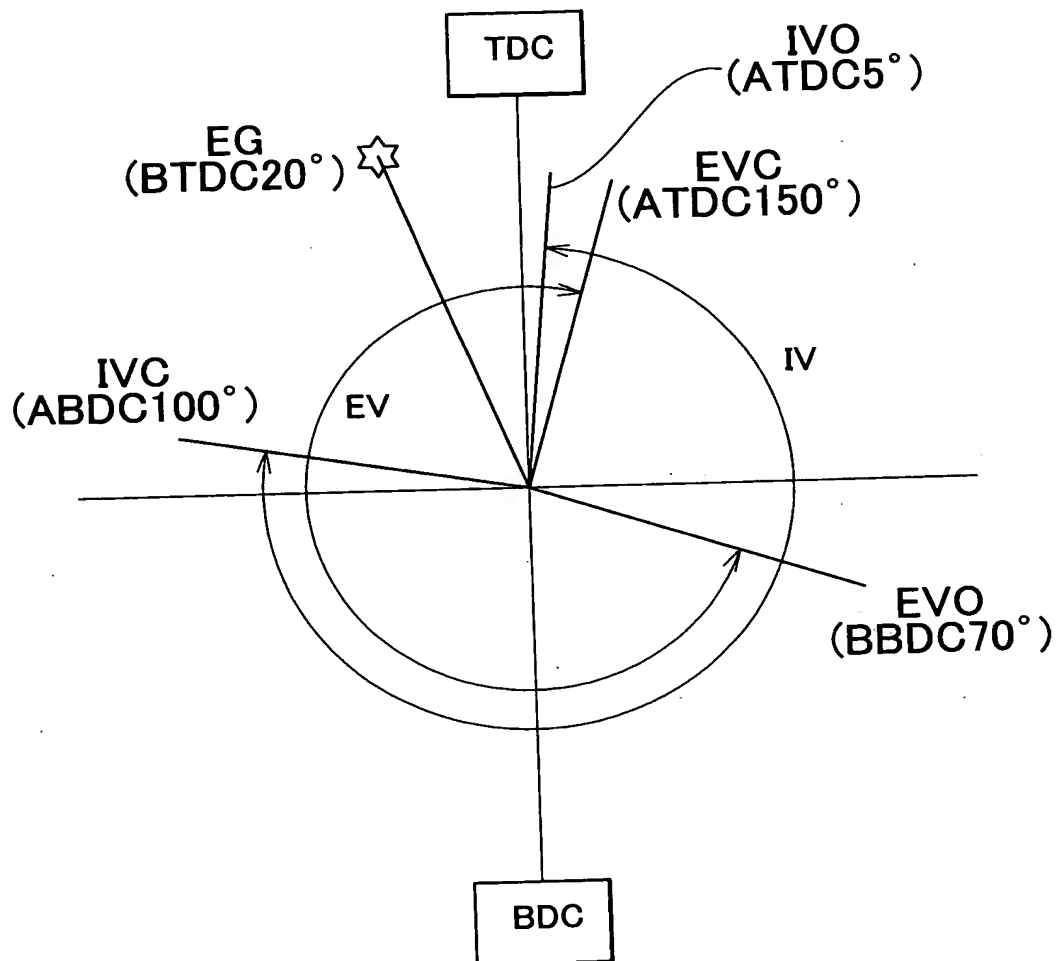


FIG. 9

(T3)2-CYCLE SELF IGNITION MODE →
4-CYCLE SELF IGNITION MODE

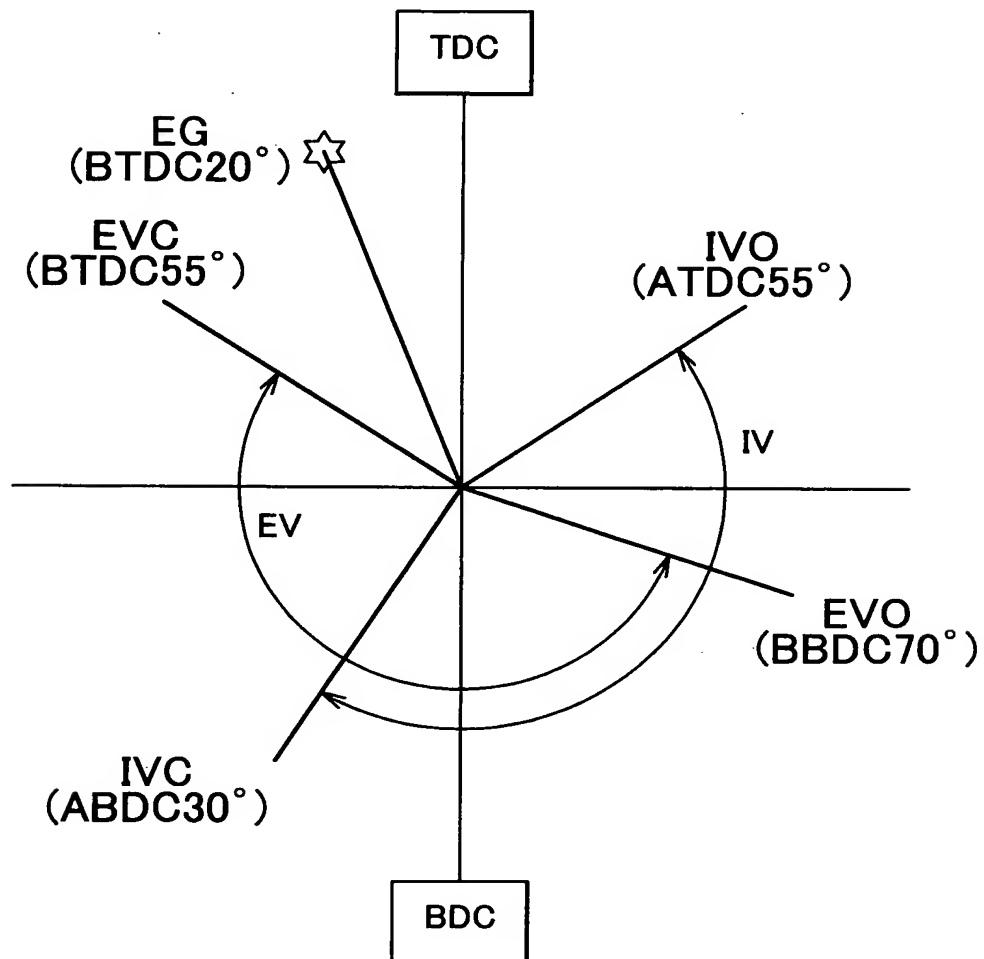


FIG. 10

(T5) 4-CYCLE SPARK IGNITION MODE IN HIGH LOAD →
 4-CYCLE SELF IGNITION MODE
 (T5L) 4-CYCLE SPARK IGNITION MODE IN LOW LOAD →
 4-CYCLE SELF IGNITION MODE

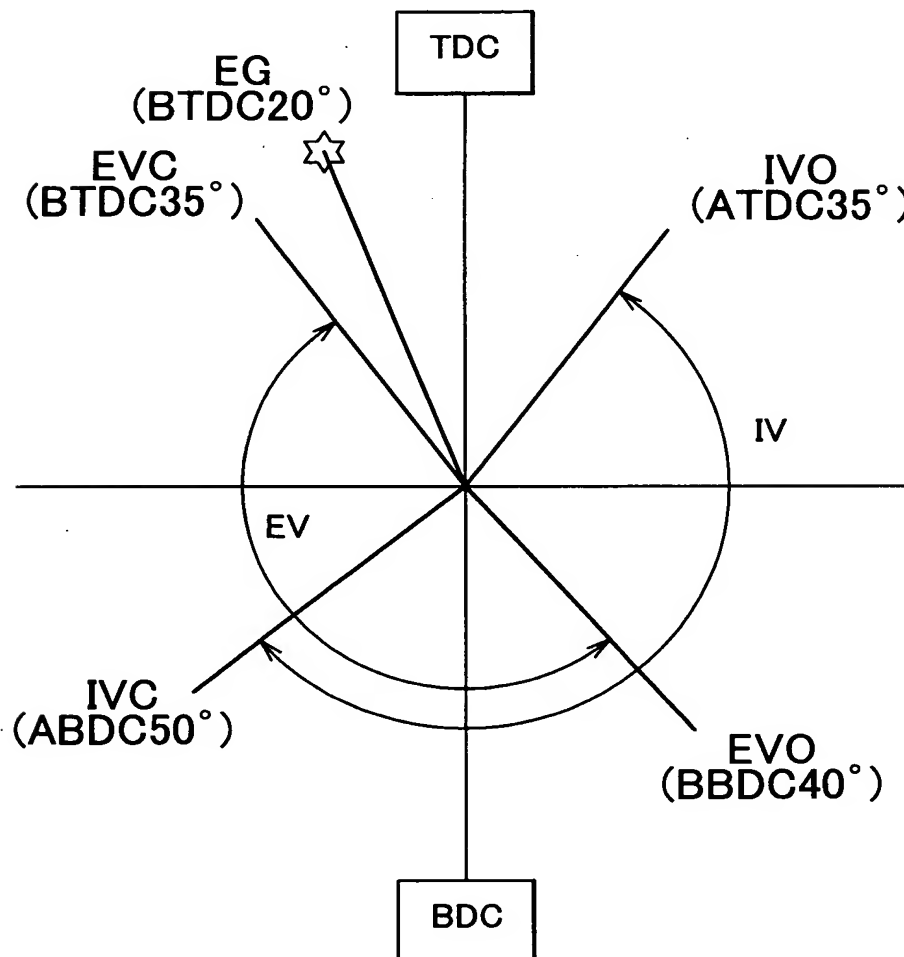


FIG. 11

(T6) 4-CYCLE SELF IGNITION MODE →
 4-CYCLE SPARK IGNITION MODE IN HIGH LOAD
 (T6L) 4-CYCLE SELF IGNITION MODE →
 4-CYCLE SPARK IGNITION MODE IN LOW LOAD

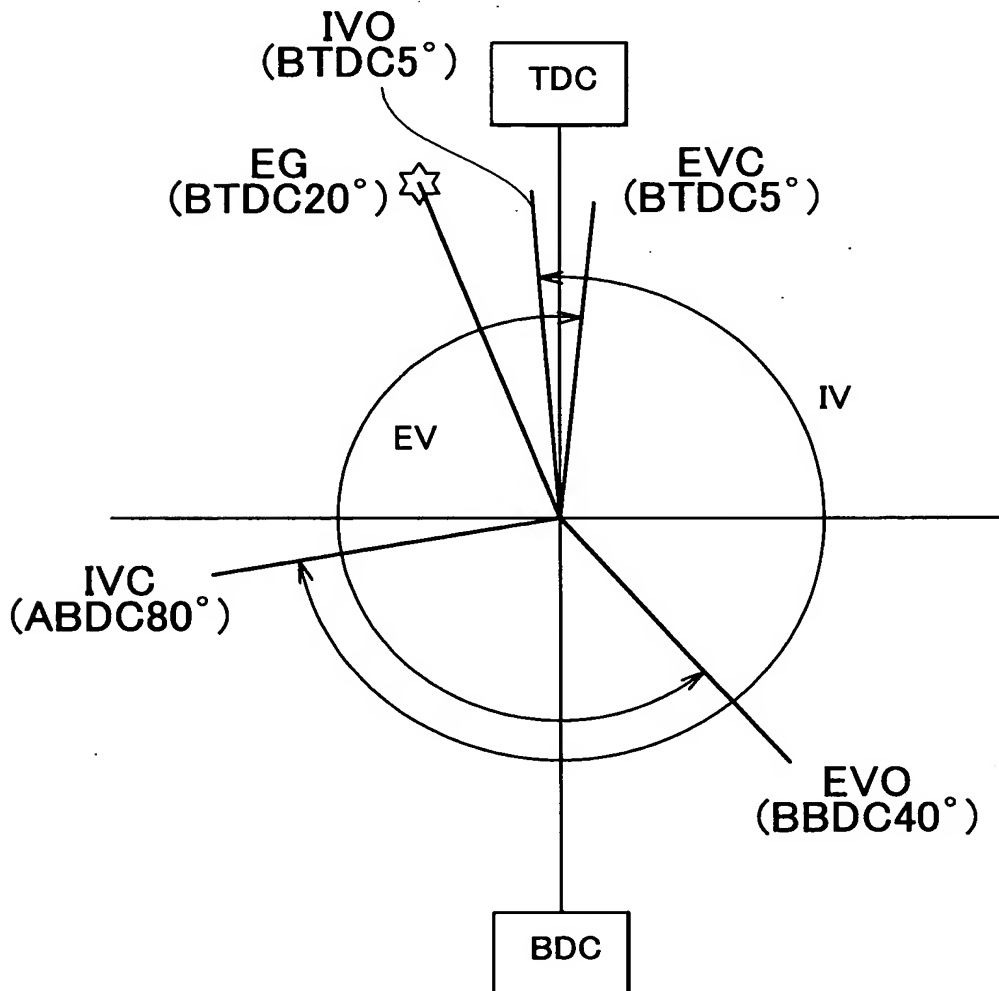
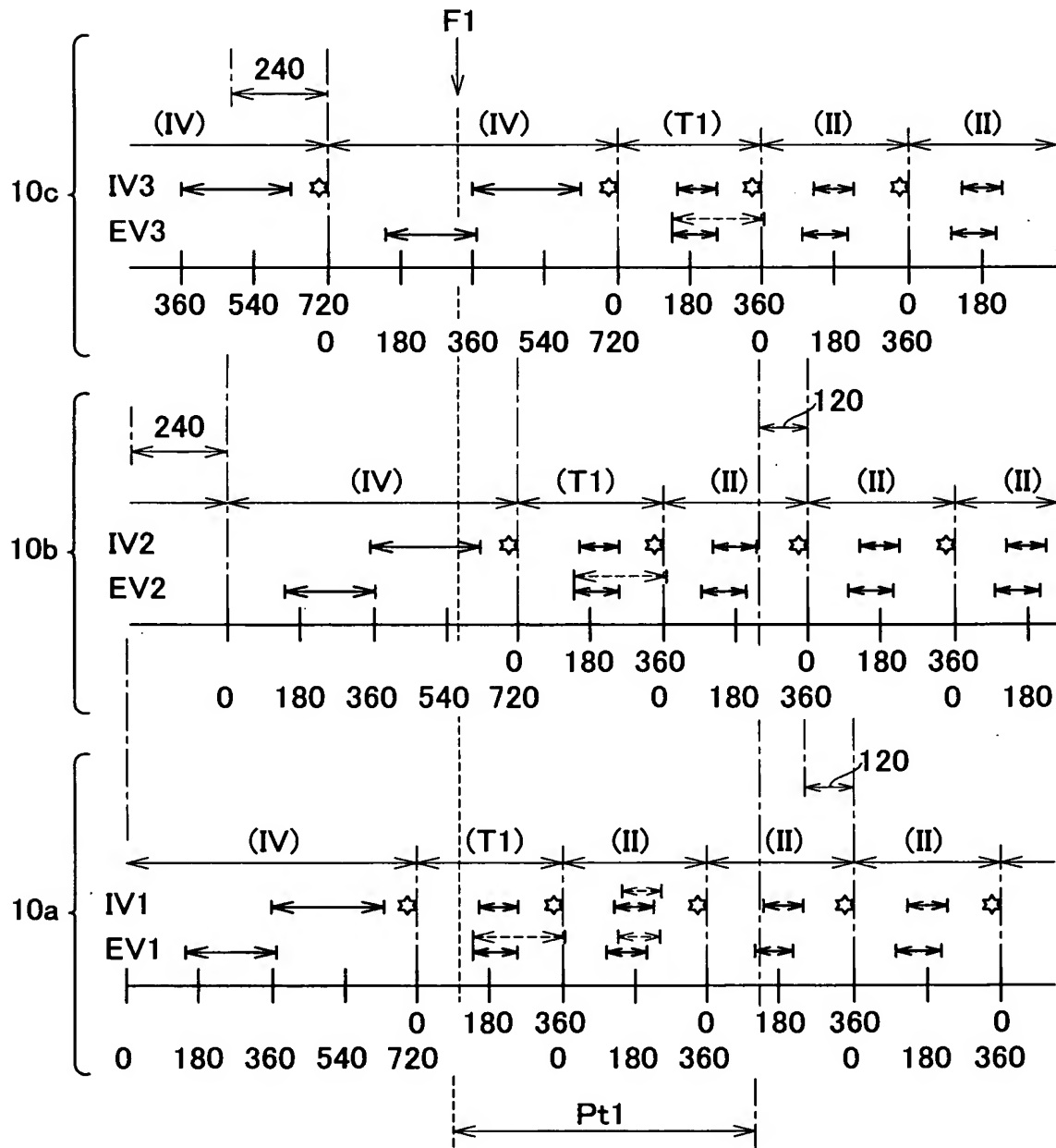


FIG. 12

4-CYCLE SPARK IGNITION MODE IN HIGH LOAD
→ 2-CYCLE SELF IGNITION MODE



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graph TD
    START([START]) --> S2[CC = N  
CA = 0]
    S2 --> S4[SELECT CYLINDER UNIT  
WITH EXHAUST VALVE  
TO BE NEXT OPENED]
    S4 --> S6{CC = N ?}
    S6 -- YES --> S20[OBTAIN CA]
    S6 -- NO --> S8{MODE  
ALREADY  
SWITCHED ?}
    S8 -- YES --> S20
    S8 -- NO --> S10{MODE  
SWITCH REQUEST  
DETERMINED ?}
    S10 -- "T1, T4, ~T6  
(4C → 4C,  
4C → 2C)" --> S14[MODE SWITCH  
CA = 0]
    S10 -- "T2, T3  
(2C → 4C)" --> S12{CA ≥ (720° / N) ?}
    S12 -- YES --> S14
    S12 -- NO --> S20
    S14 --> S16[CC = CC - 1]
    S16 --> S18{CC = 0 ?}
    S18 -- YES --> RETURN([RETURN])
    S18 -- NO --> S20
    S20 --> S4

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FIG. 14

2-CYCLE SELF IGNITION MODE
→ 4-CYCLE SPARK IGNITION MODE IN HIGH LOAD

